Remarks

This is a response to the Office Action dated April 11, 2005.

Claims 1 – 23 are pending in the application, claims 1 – 11 and 17 – 23 having been withdrawn from consideration.

Claim 12 was rejected under 35 USC 102(b) as being anticipated over Sullivan (USP 5,004,399). Claims 12-16 were rejected 35 USC 102(b) as being anticipated over Murakami et al. (USP 4,989,444). Claims 13 and 14 were further rejected under 35 USC 103 as being obvious over Sullivan and secondary references Caveney (USP 6,769,861) and Sartorio (USP 4,806,071), respectively. Claim 16 was rejected under 35 USC 103 as being obvious over Murakami and Sartorio.

Per the above amendment, claims 12-16 have been amended and new claims 24-38 added.

Claim 12 has been amended by replacing "*automated manipulating means*" with a more precise term "*a programmable robot*", and by adding "*to a machining device*".

Independent claims 27 and 33, corresponding the two embodiments covered in claim 12, have been added. The terms used in the new claims correspond to the terms used in the specification. The added dependent claims are based on the specification or the figures.

Claim 12 was rejected (35 USC 102) as being anticipated by Sullivan et al. (USP 5,004,399).

Sullivan discloses a robot 12 with an end effector 10 comprising a platform 28 and a catcher 42. Sullivan does not disclose any transfer means arranged to transfer the robot

12, and the end effector 10 along with the robot 12, along a given path, for transferring the robot 12 to different locations. Therefore, Sullivan fails to anticipate claim 12 under 35 USC 102.

Furthermore, Sullivan does not disclose the robot 12 removing the slice S from the support of the platform 28 during the alignment of the slice S. The end effector 10 gripping the slice S comprises the necessary devices for the alignment of the slice S. Sullivan does not disclose the slice S being removed from the end effector 10 during the alignment of the slice S.

In contrast, as set forth in claim 12, the robot delivers the work piece, i.e. transfers and hands over the work piece, to a positioning means. The positioning means is different from the gripper of the robot.

Claims 12 – 14 were rejected under 35 USC 102 as being anticipated by Murakami et al. (4,989,444).

Murakami discloses a press brake 1 comprising a support base 5. The support base 5 is for temporarily supporting a plate shaped material 3 in an attracting manner (column 6, lines 66 – 67). Murakami does not disclose the support base 5 being used for positioning or centering the material 3 before transferring it to the press brake 1. The press brake 1 comprises a back gauge against which the material 3 is set for regulating a margin for bending (column 7, lines 20 – 23). The industrial robot 2 controls the posture of the material 3 as the material is moved to contact with the back gauge and between the upper die 11 and the lower die 12 (column 8, lines 25 – 37). Only after setting the position of the material 3 is the material 3 supported on the support base 5 and released from the holding member H in the industrial robot 2. Therefore, the support base 5 is not for setting the position of the material 3.

As set forth in claim 12, the work piece 7 is released to a device 12 for setting the position of the work piece 7; and after that, the positioned work piece 7 is gripped, and delivered to a machining device 6 (see "*to deliver the work piece to said positioning means, to grip the positioned work piece, and further to deliver the positioned work piece to a machining device*").

Murakami does not disclose devices for setting the position of the work piece. Therefore, Murakami fails to anticipate claim 12.

Murakami further does not disclose two or more support bases 5 for temporarily supporting the material 3, nor devices for setting the position of the material 3. Therefore, the 35 USC 102 rejection of claim 13 over Murakami is without merit.

Murakami does not disclose a positioning device for setting the position of the material 3 nor a transfer device keeping the positioning device at a predetermined constant distance in relation to the industrial robot 2. Therefore, the 35 USC 102 rejection for claim 14 over Murakami is without merit.

Claim 13 was rejected under 35 USC 103 as being unpatentable over Sullivan et al in view of Caveney (USP 6,769,861).

Sullivan does not disclose transfer means arranged to transfer the robot 12, and the end effector 10 along with the robot 12, along a given path, for transferring the robot 12 to different locations. Caveney discloses only one apparatus for alignment and orientation of a substrate 1. The apparatus comprises two steps 11, 12 for providing accurate registration surfaces against which the substrate 1 can be banked. Caveney does not disclose two or more apparatuses for alignment and orientation of substrates being installed in the same device in the effector 2. Therefore, it is respectfully submitted that the combination of Sullivan and Caveney fails to render the subject matter of claim 13 obvious.

Claim 15 was rejected under 35 USC 103 as being unpatentable over Sullivan et al in view of Sartorio (USP 4,806,071).

Sullivan fails to disclose transfer means arranged to transfer the robot 12, and the end effector 10 along with the robot 12, along a given path, for transferring the robot 12 to different locations. See above arguments for claim 12. Accordingly, the rejection should be withdrawn.

Claim 16 was rejected under 35 USC 103 as being unpatentable over Murakami et al in view of Sartorio.

Murakami does not disclose the support base 5 being used for positioning or centering the material 3 before transferring it to the press brake. See above arguments for claim 12. Accordingly, the rejection should be withdrawn.

Per the discussion above, newly added independent claims 27 and 33, and the new claims respectively dependent therefrom, are also believed to be patentably distinguishable over the above noted prior art.

In view of the foregoing, the examiner is respectfully requested to reconsider the application, and pass the same to issue at an early date.

Respectfully submitted,

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